tubercles are low and rough and very numerous. Many of the larger spicules extend the whole distance between two adjacent polyps, and sometimes even exceed this length. They fall into three groups, fairly distinct in shape:—(*a*) large modified fusiform spicules, which taper more or less towards the ends and measure from ·9–3 mm. in length by ·25–·45 mm. in breadth; (*b*) squamous or scale-like spicules, often with slightly lobed margins, which measure from ·8–1·1 mm. in length by ·4–·6 mm. in breadth; and (*c*) large modified squamous spicules, consisting of a flattened tuberculate basal portion and of a projecting part which forms the projecting spine of the verrucæ. They measure, in length by breadth in millimetres, as follows:—·7 × ·5, ·6 × ·4, ·5 × ·3.

In the polyps there are slender spindle-shaped and club-shaped spicules. They are often slightly curved and either taper to both ends or are blunt and rounded at one end and pointed at the other. Many of these exhibit fairly prominent spines towards the thicker end. They vary considerably in size, being from ·3–·5 mm. in length and from ·02–·06 mm. in breadth. They are found chiefly in the tentacles, where they form an operculum to the retracted polyp; but an incomplete and irregular crown or collar is formed by them at the base of the tentacles.

In colour the spicules vary from white to semitransparent, while the whole colony has a whitish-brown appearance.

This species differs from *Acis pustulata* in not having violet-coloured opercular spicules and in the branches not being compressed in the plane of branching. It also differs from *Acis orientalis* in having the polyps on all sides of the stem and branches and in the branching not being confined to one plane.

From the fact that it was collected in Ceylon waters I propose to name it *Acis indica*, to mark it as distinct from *Acis orientalis*.

Hab. Deep water off Galle, Ceylon.

XLV.—*A new Bat from the United States, representing the European* Myotis (Leuconoe) Daubentoni. By Oldfield Thomas.

The subgenus *Leuconoe* * has not been hitherto recognized as occurring in North America, but *Myotis yumanensis* should probably be regarded as a member of the group, although not a strongly marked example of it.

* Type, *Myotis Daubentoni*, the "Wasser-Fledermaus."

Now, however, I am able to record that *Leuconoe* in its most typical form does occur in that continent; for Mr. J. ffolliott Darling, a naturalist already known to zoologists for his work in Mashonaland, has recently presented to the British Museum a bat, obtained in the Yellowstone Park, which is evidently closely allied to the typical species of the subgenus, *M. Daubentoni*.

Thanks to the kindness and generosity of the authorities of the United States National Museum, I have had for comparison with Mr. Darling's bat a complete series of North-American *Myotis*, as worked out in Mr. G. S. Miller's fine monograph of the group. None of the bats there described can be confused with it, nor have any species been described since.

It may be called

Myotis (*Leuconoe*) *carissima*, sp. n.

Closely allied to the European *M. Daubentoni*, which it evidently represents in North America.

General characters and proportions as in *Daubentoni*. Sides of muzzle heavily whiskered. Ears narrow, of medium length; laid forward in the spirit-specimen they just reach to the tip of the nostrils; their inner margin evenly convex below, slightly concave before the tip, which is narrowly rounded off; outer margin excavated above, slightly convex below; basal lobe well marked, rounded. Tragus rather short, with straight inner margin, narrowly rounded tip, sloping outer margin, and well-defined basal lobe.

Feet very large, their length more than two thirds that of the tibia; claws medium.

Wings attached to the side of the metatarsus. Calcars very long, more than double the length of the free portion of the uropatagium, their tips forming prominent lobules exactly as in *Daubentoni*; no postcalcareal lobules. Tail scarcely projecting from membrane. Wings hairy for about half an inch on each side of the body, above and below; base of uropatagium thinly haired, its free edge quite without fringe. Toes with tufts of hair overhanging the claws.

Colour above and below (in spirit) uniformly smoky blackish, the tips of the hairs indistinctly buffy or pale brown. Ears, wing-membranes, and feet also blackish.

Anterior premolar about twice the size of the second, decidedly drawn inwards, but in older specimens it might take its place in the general line.

Dimensions of the type (measured on the spirit-specimen):—

Forearm 38 mm.

Head and body 45; tail 36; head 17; ear 13 × 8; tragus

on inner edge 5·5; thumb 8; third finger, metacarpus 33, first phalanx 11·5, second phalanx 10·5, third phalanx 7·?; fifth finger, metacarpus 31, first phalanx 9, second phalanx 9; tibia 16; hind foot (c. u.) 11; calcar 16; free border of uropatagium 6.

Hab. Yellowstone Lake, Yellowstone Park, N.W. Wyoming. Alt. 8000 feet.

Type. Female (just adult). B.M. no. 4. 4. 25. 1. Collected September 1903; presented by J. ffolliott Darling, Esq. "Caught flying about the Lake Hotel, although the weather was snowy."

This bat is very closely allied to *M. Daubentoni*, but has a more strongly whiskered muzzle, rather larger ears, a less projecting tail-tip, and appears to be darker in colour throughout.

My own inclination would still, however, be to regard it as a subspecies of *M. Daubentoni*; but as I am not writing a general monograph of the group, it seems better in the case of a United States bat to conform to the ideas about nomenclature prevalent in that country.

From *M. yumanensis saturatus*, Miller, apparently its nearest American ally, *M. carissima* is readily distinguishable by its much longer forearm and still larger feet. *M. subulatus*, Say, of similar size, has conspicuously smaller feet and broader ears.

The British Museum also contains another bat, from Lake Winnipeg, collected by Sir John Richardson, which appears to be referable to *M. carissima*, but is unfortunately in too bad a condition for certain determination. It was referred by Dobson to *M. lucifugus*, but is certainly not that species. Allowing for the great altitude of Lake Yellowstone, the occurrence of the same species at Lake Winnipeg, considerably further north, would be quite natural.

In the Old World *M. Daubentoni* occurs in Scandinavia, and, as Dobson says, "attains the most northerly range of all the species of the genus."

XLVI.—*Three new Bats, African and Asiatic.*

By Oldfield Thomas.

Hipposideros Commersoni and its subspecies.

The bats currently referred to *H. Commersoni* fall into four groups, divisible by size, by the number of supplementary nose-leaves, and by colour.